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Latin America's Experience with Export Subsidies

Julio Nogués

The failure of export subsidies, particularly in Argentina, should remind us to distinguish what is *possible* from what is *likely*. In Latin America the money would be better spent on infrastructure, health, and education.

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Twenty years ago, it was believed that export subsidies would produce more diversification and better export performance. This has not happened. Why?

In most cases, export subsidies were not supported by more open import policies — so subsidies reduced only marginally the anti-export bias of Latin American countries. Unstable real exchange rates have also hurt exports.

Export subsidies appear to have improved exports in Brazil, which also liberalized imports, significantly stabilized real exchange rates, and promoted other policies conducive to export growth. Yet Mexico, after reducing import barriers, also enjoyed improved exports — with minimum export subsidies, and with apparently lower social costs than Brazil experienced.

Export subsidies have failed in other Latin American countries — and particularly hurt development in Argentina, where fraud, corruption and rent-seeking have been rampant.

Participants in the current Uruguay Round of international negotiations seem to be seeking two different goals on subsidies and countervailing measures (CVMs). Supporters of subsidies want to make it more difficult to introduce CVMs; countervailers want more stringent rules on subsidies. Both subsidies and CVMs are viewed as good policies by their users. But empirical evidence does not support these policies, and export subsidies and CVMs entail other costs to the societies using them.

The failure of export subsidies, particularly in Argentina, should remind us of the importance of distinguishing what is possible from what is likely, contends the author. The likelihood of subsidies improving exports is low, when they are applied in a context of high import protection and unstable real exchange rates.

Finally, export subsidies compete with other government programs and — especially considering their failure rate — should be dismantled in this period when the welfare of Latin Americans has declined dramatically. The money would be better spent on infrastructure, health, and education projects.

This paper is a product of the International Trade Division, International Economics Department. Copies are available free from the World Bank, 1818 H Street NW, Washington DC 20433. Please contact Salome Torrivos, room S8-033, extension 33709 (38 pages with tables).

The Experience of Latin America with Export Subsidies

by
Julio Nogués

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I. Introduction

There is general agreement, that the crisis of Latin-America has entailed important social and economic costs. One consequence, has been the declining amount of resources that is left to the governments, after whatever service of their debts they make. Under these circumstances, the importance of allocating available resources in socially productive projects, increases; think about the plight of Latin-America's people in terms of declining real wages and declining quality and quantity of social programs in areas such as health and education with high social payoffs.

A traditional subsidy program of Latin-American governments has been in favor of non-traditional export activities. The purpose of this paper, is to provide an answer to the question of whether the experience of Latin American countries with those subsidies has been positive or negative. In doing this, I will discuss several dimensions of export subsidy programs. The first, refers to the extent to which these subisidies have met the objectives which economists and policymakers had when they were initially launched more than twenty years ago. This is done in sections II and III. The later section also examines Brazil, which is a country credited with having

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successful export subsidy policies and contrasts it with Mexico who has eliminated most of its export subsidies and still has enjoyed high export growth.

The second dimension, refers to the welfare effects of subsidy policies in terms of resource allocation. Finally, an evaluation of export subsidies would be incomplete, without a discussion of their political-economy consequences. These two dimensions of export subsidies are analyzed in section IV.

Section V draws a parallel between the consequences of subsidies for the subsidizers and countervailing measures for the countervailers. Section VI concludes the paper with some final remarks.

II. Arguments and Policy Environment Surrounding Export Subsidies

In this section I will start by summarizing the major arguments that historically supported export subsidy policies. From the point of view of this paper, recent arguments in favor of subsidies such as those of strategic trade theory are not discussed. It has only been recently that these ideas have been used to support subsidy policies. Thus, more time is necessary before an empirical evaluation of strategic subsidy policies is made.

The second part of this section, will discuss the policy environment in which subsidies have been working. In particular, I focus on import protection and stability of the real exchange rate.

1. Arguments in favor of export subsidies

A major concern when subsidies were initially introduced was the high concentration of exports in a few commodities and the vulnerability that this

implied. 1/ These were the years (late 1950s and early 1960s), when export pessimism was spreading as Latin America's terms of trade were projected to decline (Prebisch, 1959). In retrospect, it should be noted that, these were also the years when industrial countries were making their greatest post-World War II efforts to reduce trade barriers. The 60s were also the years when some developing countries -- for example, Korea -- were starting to profit from the increasing trade openness of industrial countries. But these experiences, as well as the lessons derived from them, never played an important role in shaping the policy recommendations of the Economic Commission for Latin America (ECLA); Latin-America's think tank during the 60s and 70s.

Given the poor export performance of Latin American countries during the 50s, Prebisch (1959) in particular and ECLA more generally, recommended regional integration as a way out of balance of payments difficulties. These policies were aimed at increasing the exports of the industries which had grown behind high protective barriers. Discriminatory export subsidies in favor of the same protected industries were a natural corollary of integration policies.

A second argument in defense of export subsidies was built on Keynesian assumptions. For example, Schydlowsky (1968), developed a model where he showed that higher manufactured exports could solve Argentina's

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1/ In some cases, the goal of export diversification was explicitly mentioned in the subsidy programs. For example, one can read in the introductory considerations of Decree No. 3056 of 1970 which implemented the fiscal reimbursement program of Argentina that"... higher value added, and the characteristics of the products whose exports are promoted (by reimbursements), will support the diversification of exports..." (Author's translation).

unemployment and excess capacity problems. In order to increase manufactured exports, he recommended that discriminatory export subsidies be introduced. Schydlowsky went as far as arguing that the increased taxes forthcoming from economic activity induced by more manufactured exports could finance the subsidies and even result in a fiscal surplus.

The influence of these ideas should not be dismissed. Only a few years ago, in a report prepared for the Association of Exporters of Perú (the lobby for non-traditional exports), Schydlowsky and collaborators (1983) recommended again that the structure of discriminatory export subsidies be increased. After some hesitation and changes of key personalities, these policy suggestions were implemented.

In contrast to Keynesian models, subsidies in neoclassical models are based on market failures and second-best policies. The theoretical underpinnings of the neoclassical theory of subsidies goes back to Bhagwati and Ramaswani (1963). Nevertheless, Bhagwati and Ramaswami concluded that when the goal was to increase the output of a specific industry production subsidies are superior to tariffs.

Finally, an important justification for export subsidies was proposed by Balassa (1975). He stated that the application of "... a tariff-cum-subsidy scheme will have the same effect as production subsidies, except for the fact that higher prices paid by the consumer will distort consumption patterns" (Balassa, 1975, p. 373).

The truth of the matter is that reality has been quite different for the world these models depicted. For example, over the long run, the terms of trade between commodities and manufactures have remained quite stable (Grilli and Yan, 1988). Furthermore, in Latin America, unemployment and

underemployment should be attributed more to structural and policy-induced rigidities than to the weakness of aggregate demand. In this environment, export subsidies have merely added to the inflationary pressures of government deficits.

There has also been much confusion regarding the policy recommendations of neoclassical models. For example, it is usually said that preshipment export credit is "... necessary to offset domestic capital market distortion or anti-export biases in product markets... " As a matter of policy behavior, however, only ".... the former rationale would satisfy this condition, and only to the extent that empirical evidence demonstrates a capital market distortion..." (Fitzgerald and Monson, 1987).

Finally, regarding export diversification and improved export performance, the reality shows that in only a few cases has this occurred. I will argue that this should not be taken as evidence in support of export pessimism, but as a consequence of the fact that the policies of many Latin-American economies for which export subsidies were recommended simply did not provide the environment for manufactured exports to flourish and export diversification to increase over time. This environment was characterized among other things by high anti-export bias and unstable real exchange rates.

2. Anti-export bias and real exchange rate behavior

A country's export performance depends on a number of policies -- including exchange rates, subsidies incidence of taxes on exports, import protection, mobility of factor markets, openness to direct foreign investment, etc., etc. The purpose of this section is to concentrate on two of the most important determinants of export performance, namely import protection and the real exchange rates (RER).

2.1 Anti-export bias

Historically, it is well known, that starting with the crash of the 1930s, a majority of Latin-American countries embraced import-substitution policies (Balassa, 1982). The major exception to this trend was Perú, who during the 50s, remained integrated into the world economy (Nogués 1989).

As said, the policies followed by Latin American countries, when balance of payments problems continued to delay development, was one of maintaining and in some cases increasing protection and reinforcing it with integration and export subsidy policies.

But, because protection was so high, these policies reduced the anti-export bias only marginally. Until the late 70s, only three countries had introduced liberalization policies. These were Brazil and Columbia in the 60s and Chile in the 70s. Brazil and Columbia later reversed to more protectionist policies. It has only been in recent years that more countries including Bolivia and Mexico are introducing trade liberalization measures.

In summary, for decades many Latin-American economies have remained heavily protected. In order to analyze the anti-export bias during the 80s, I use US countervailing duties (CVDs) as a proxy for the height of export subsidies. Before commenting on the fidings, it is important to spell out some shortcomings. First, CVDs are based on a limited number of observations. In our case, the estimates are based on a maximum of 19 cases for Mexico and a minimum of 1 case for Chile. These sample sizes are too small to claim representativeness.

Second, if the US follows the guidelines of the Subsidy Code (Article 4), its estimates of subsidy margins should be conservative. On the other hand, when the US is unable to obtain information from the subsidizing

government, it uses information provided by the petitioning industry, which in some cases could lead to high CVDs. How these considerations affect our estimates of average CVD margins remains unknown. In the case of Argentina, for example, the average export subsidy between 1980 and 1984 is around 12 percent. 1/ In contrast, in the case of Perú -- the other country for which I have some aggregate estimates -- the figures suggest that in 1981, the average fiscal subsidy (Certificado de Exportaciones, CERTEX) was 15 percent while the average interest-rate subsidy could have been as high as 6 percent (Nogués, 1987). These add to a figure quite close to the average CVD rate applied by the US against imports from this country. For the other countries, my impression is that except for Chile and Venezuela, and in spite of small sample sizes the average CVDs are quite representative of average export subsidies. Chile is known for not providing export subsidies and the one case reported in Table 1 is believed to be an exception to the general rule. In the case of Venezuela the average CVD is affected by one extreme observation.

With these qualifications, the figures reported in Table 1 show that except for Venezuela, the simple average subsidy margins are lower than average tariff rates (Table 1 column 1 and 3). These economy-wide evidence of an anti-export biases hide differences at the product level. Also, the anti-export bias is even higher than what the figures on subsidies and tariff rates portray. First, average tariff rates do not incorporate the protective effects of NTBs, which in general, benefit heavily protected industries. Second, the structure of protection behind average tariff rates is far from uniform. In the countries under consideration, tariff rates protecting

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1/ This excludes reimbursement of indirect taxes. See Table 5 in this paper.

manufacturing industries are usually the highest, and always higher than those on nonproduced goods and efficient primary sectors (Balassa, 1982). This is important, because in general it is precisely the exports undertaken by protected manufacturing industries which have been heavily subsidized.

Table 1: AVERAGE CVD MARGINS, TARIFF PROTECTION AND PERCENTAGE FLUCTUATIONS IN RERs, DURING THE 1980s

Country	(1) Average CVD Margins (%)	(2) Maximum Percentage Fluctuations in RERs (%) During 1980-87	(3) Average Tariff Rates (%)	(4) (2) ÷ (1)	(5) (3) ÷ (1)
Argentina	5 (4)	244	28	48.8	5.6
Brazil	12 (11)	135	51	11.3	4.3
Chile	12 (1)	223	15	18.6	1.3
Colombia	7 (3)	189	52	27.0	7.4
Costa Rica	17 (2)	152	24	8.9	1.4
Mexico	10 (19)	204	<25	20.4	2.8
Perú	25 (6)	131	>57	5.2	<2.2
Venezuela	69 (3)	224	34	3.2	>0.5

Source: Column 1 estimated from affirmative US CVD findings the number which is in parenthesis; column 2 from Table 2 and column 3 from Laird and Nogués (1989). Average CVDs are estimated from cases between 1980 and 1987. Average tariff rates have been estimated during 1987-1988. For Colombia, Costa Rica, Perú, and Venezuela these averages are unweighted. Finally, < and > stand for lower than and higher than respectively.

Summing up, the measurements of the anti-export bias of Latin-American countries undertaken until the late 70s, as well as representative figures for the 80s, suggest that except for a few years and few countries, the anti-export bias has remained high. It should also be mentioned that during the 80s, trade policies of Latin American countries have been very unstable (Laird and Nogués, 1989).

2.2 Real exchange rate (RER) instability

Table 2 shows RERs for the period 1976-1987. Except for Brazil, the figures show great variations. In each of the severe cases of currency overvaluation shown in this table -- and more generally since WWII -- the story has been the same, namely, an attempt to use the nominal exchange rate as an anti-inflation instrument in the presence of mounting fiscal deficits and inflationary pressures. Obviously, the message stemming from repeated episodes of currency overvaluation is simple: "don't expect a favorable RER to last long." In this environment, there is little if any incentive to invest in export activities. Export subsidies, therefore, can do little to reverse these negative expectations.

Among this group of countries, Brazil has been the one which during the 1960s and most of the 1970s has consistently attempted to avoid episodes of severe currency overvaluation (Coes, 1988). This country is also the one which over time shows one of the best record of export performance and diversification among Latin-American countries.

Finally, in Table 2, Perú and Venezuela appear as having a relatively low instability of their RERs. Nevertheless, these figures hide what actually are complicated exchange-rate regimes as both countries have escalated commercial exchange rates. For example, recently in Perú the maximum

Table 2: WEIGHTED REAL EXCHANGE RATES INDEXES FOR A SAMPLE OF LATIN-AMERICAN COUNTRIES, 1978-87 1/

Year	Argentina	Brazil	Chile	Colombia	Costa Rica	Mexico	Perú	Venezuela
1978	55	123	85	95	87	54	88	91
1979	77	113	86	98	91	90	90	92
1980	100	100	100	100	100	100	100	100
1981	91	122	118	108	63	114	119	112
1982	51	128	107	115	73	82	123	121
1983	43	104	87	114	83	72	114	110
1984	50	104	85	105	82	84	114	94
1985	44	100	69	91	81	86	94	90
1986	44	95	58	68	73	60	106	75
1987	41	95	53	61	66	56	125	54

1/ Weights are given by the value of trade with the main trading partners. The RER are estimated as the inverse of the nominal exchange rate times the ratio of the wholesale-price index of the trading partners to the domestic wholesale price index.

Source: Prepared at the World Bank with IMF data.

commercial exchange rate was more than four times higher than the minimum. This multiple exchange-rate regime is also used by Perú in an effort to promote manufactured exports. This is done by granting these exports the more -- or a mix of most -- attractive commercial exchange rates. Thus, these countries' true variability of their RERs is higher than what appears to be in Table 2.

Column 4 in Table 1, presents the ratio between percentage fluctuations in RERs and CVD margins as proxy for subsidies. The figures show that in Argentina, the percentage fluctuation in the RER has been 49 times higher than subsidies. This pattern is recorded in the other countries, but the differences are not as high. It is important to recall, that important changes in RERs do not occur over a period of several years, but often, from year to year or within a two-year period. In Argentina, the real devaluation

was 44 percent between 1981 and 1982; in Mexico it was 37 percent between 1981 and 1983, in Perú it was 39 percent between 1976 and 1978; and in Venezuela it was 15 percent between 1983 and 1984. Even for the sharpest observers, changes of these magnitudes are difficult to predict, and what is worse, even if exporters foresee these RERs shifts, usually future markets are underdeveloped and traders cannot cover themselves.

In summary, the conclusion is that proportional instabilities of RERs have been much higher than subsidies. Therefore, from the perspective of enhancing the returns to export activities, stabilizing RERs appears to be significantly more important than the policy mix of high import protection, export subsidies and unstable RERs.

III. Export Diversification and Export Performance

Section II argued that one of the motives for introducing export subsidies, was to increase the relative performance of manufactured exports, thus reducing the economic consequences of the forecasted decline in the terms of trade of raw-material exporters. This section also presented estimates showing that during the 80s subsidies had not removed the anti-export bias and that the RERs have been very unstable. What did actually happen with export diversification and export performance? This section will first discuss the casual evidence on export diversification and export performance and then discuss the econometric findings on the contribution of subsidies to exports.

Table 3 presents the ratio of manufactured exports to total exports. This simple but straightforward measure of export diversification shows that the experience of Latin-American countries has been quite diverse but on average disappointing.

In Argentina, the indicator of export diversification has remained stable over time. The case of Argentina is quite disappointing, since it has invested important sums of money in export subsidies (Table 5), and still real manufactured exports have declined.

Table 3: RATIO OF MANUFACTURED EXPORTS TO TOTAL EXPORTS IN A SAMPLE OF LATIN-AMERICAN COUNTRIES

	1970-74	1975-79	1980s 1/
Argentina	19.2	24.7	22.5 (1980-87)
Brazil	18.2	28.9	39.9 (1980-85)
Chile	4.6	9.8	7.7 (1980-86)
Colombia	19.1	19.6	19.4 (1980-87)
Costa Rica	21.1	22.5	26.6 (1980-84)
Mexico	37.1	27.2	17.7 (1980-85)
Perú	2.1	7.7	14.1 (1980-84)
Venezuela	1.4	1.4	1.9 (1980,81,83)

1/ Between brackets are years during the 1980s for which figures are available.

Source: U.N. Statistical Office.

Brazil has diversified significantly in a context of high export growth. As I will argue, it is also one of the few cases where export subsidies appear to have contributed significantly to export performance.

Chile is in our sample, the non-subsidizer country. In this sense, it contrasts with Brazil. During the 80s, this country's uniform tariff rate has fluctuated between 10% and 35%. Also, after 1982, Chile has adopted realistic exchange rate policies. In spite of this, Chile remains heavily dependent on primary exports.

In Columbia, export diversification has remained stagnant. During the 80s, the export diversification ratio has declined from a maximum value of 27% in 1981 to a minimum of 14.6% in 1986.

In Costa Rica, export diversification has remained stagnant.

In Mexico, export diversification shows a declining trend in spite of its subsidy policies. It should be said, that the figures for the 1980s hide a recent important modification of Mexico's export structure. While in 1981 the ratio of manufactured exports to total exports was 10 percent, it increased to 27 percent in 1985 and has risen even higher since then. This positive trend towards export diversification has been recently accelerated by further devaluations and trade-liberalization measures. For example, non-tariff barriers have been drastically reduced and the maximum tariff rate has declined from 100% to 20% (Laird and Nogués, 1979). Also, in early 1985, Mexico and the US signed a bilateral agreement according to which Mexico would dismantle certain subsidies in return for the US to apply the injury test (Nogués, 1986b). Thus, Mexico's recent manufactured-export boom and export diversification has taken place with minimal -- if at all -- export subsidies.

Perú is an important subsidizer and also a country which shows a positive trend towards export diversification. Nevertheless, it would be wrong to conclude that subsidies have contributed to export diversification. First, export subsidy policies had been implemented long before export diversification began to take off in the mid-1970s. Second, between 1968 and 1975, the military-socialist experiment of Velasco Alvarado took place. These were the years of growth in fiscal deficits and currency overvaluation. For example, during 1971-75, the RER was 22 percent higher than during 1976-80, and in 1975 it was 53 percent higher than in 1979. These figures are higher than the average CERTEX rate, the major export-subsidy program of Perú (Nogués, 1989). Thus, the increase in export diversification of the late 70s was a consequence of the significant real devaluation of these years. Also,

during the 80s, export diversification has declined from a maximum of 17% in 1980 to a minimum of 14% in 1982.

Finally, Venezuela is another country showing a low and stagnant rate of export diversification.

In summary, until the 80s, among the subsidizers only Brazil has, succeeded in increasing systematically its rate of export diversification. During the 80s, only Mexico have been able to diversify its export structure. But this diversification has taken place in a context where no export subsidies were used. In policy terms, the contrast between Mexico and Brazil is notable, and one might well wonder the extent to which export subsidy policies really contributed to export diversification in this latter country. Later I will return to this important issue.

Table 4 shows the percentage growth of manufactured imports into OECD countries from Latin-American countries between 1980-1987. This is taken as a proxy for export performance. The reason as said, is that the bulk of manufactured exports that do not go to industrial countries are affected by different regional trading agreements and therefore, do not compete with other efficient exporters.

It should be mentioned, that these figures are presented more for completeness of information, and in no way should be taken to reflect the differential effects of export subsidies. Be that as it may, the figures tend to confirm the pattern discussed on export diversification i.e. those that diversify are also successful exporters but successful exporters are not necessarily those that subsidize. This comes out by comparing the experience of Brazil and Mexico. In contrast, important subsidizers such as Argentina, Colombia and Peru show an extremely poor export performance. Costa Rica and

Venezuela have increased their manufactured export quite importantly, but starting from a low base.

Table 4: Change and OECD Manufactured Imports from a Sample of Latin-American Countries, 1980-87 1/

	Imports in 1980 ($US million)		Proportional Change in Manufactured Imports 1980-87	
Country	OECD	US	OECD	US
Argentina	760.0	282.2	40	117
Brazil	3,445.0	1,348.4	238	264
Chile	89.8	35.9	124	169
Columbia	342.6	164.1	54	149
Costa Rica	73.2	59.9	304	472
Mexico	4,106.6	3,635.4	239	345
Peru'	164.6	79.6	76	189
Venezuela	196.5	72.7	118	352
East Asian NICs 2/	37,919.2	16,829.3	190	350

1/ Estimated from nominal dollar figures.
2/ Includes Hong Kong, Korea, Singapore, and Taiwan, Republic of China.

Source From UN Comtrade data base.

2. The econometric evidence

So far, I have argued that among those countries who have diversified and enjoyed a statisfactory export performance, only Brazil did it in a context of export subsidies. Thus, the evidence to support export subsidy policies is weak. How about the econometric literature? Does this literature provide a stronger support for export subsidies? The answer is no. Let me first emphasize that several authors have reported positive supply elasticities of manufactured exports of LDCs. These include Balassa et al. (1986) for Greece and Korea; Schydlowsky et al. (1983) for Perú; Cardoso and Dornbusch (1980) for Brazil; Morán (1988) for groupings of 15 developing countries, etc.

These findings are reassuring; in spite of the macroeconomic instability of several of these countries, policymakers can be quite confident that exports of manufactured products will respond to exchange rate policies. Nevertheless, recent research by Caballero and Corbo (1988) suggests that instability and uncertainty are likely to reduce the price responsiveness of exports. After developing and testing an econometric model where instability can have a negative role on exports, these authors conclude that export response "... is not only a function of current export incentives but also a function of the stability of these incentives." In the empirical test, Caballero and Corbo used data from Chile, Colombia, Korea, Perú, Philippines, Thailand and Turkey.

Thus, appropriate price signals as well as the stability of these signals are crucial policies for improving manufactured-export performance. How about the contribution of subsidies? The literature I have surveyed shows that in very few cases has research shown a statistically significant contribution of subsidies to exports. I presume that many people have attempted to measure this contribution, but few have been successful. Of those who have reported, mention should be made of Balassa et. al. (1986), who attempted to quantify the separate contribution of subsidies and report that decomposing the export-price variable into "... the world market price, the exchange rate, and export subsidies have not given statistically significant results..."

Among Latin American countries, Brazil is the only one for which econometric estimates have shown a statistically significant contribution of subsidies to exports (see Tyler 1976 and Coes 1979). 1/ Other countries for

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1/ Baumann and Braga (1988) recently found a significant partial correlation between subsidies and exports. Unfortunately, these authors did not test their hypothesis in a multivariate regression analysis.

which in a multivariate regression analysis explaining export performance, subsidies have been statistically significant include Korea (Westphal and Kim, 1982) and Turkey (Faini, 1988). Thus, in relation to the number of countries who have and continue to use subsidy policies, the econometric evidence in their behalf is extremely weak.

To conclude this section, I would like to stress some characteristics of Brazil's experience which help to understand why export subsidies might have made a positive contribution. The unique characteristics refer to the policy package of the 1964-65 policy shift towards outward orientation, which lasted until the mid 70s. The outward-oriented industrial base created during these years, helps to understand these country's recent export performance in spite of its own as well as industrial countries recent protectionist policies.

First, when Brazil introduced its export subsidy programs, it also liberalized its import controls. In contrast, when the other Latin-American countries introduced export subsidies, import barriers were not reduced and in some cases, they continued to rise. The second major characteristic of Brazil's program was its successful attempt at stabilizing the real exchange rate. No other country in Latin-American has had as stable a real exchange rate as the one enjoyed by Brazil between 1965 and the early 70s. Some authors such as Coes (1988), suggest that the currency remained stable but overvalued and export subsidies compensated at least partly for this overvaluation. Finally, at the time, the political commitment towards export growth was very high and not only trade and exchange rate policies supported this commitment but also as well, other policies such as openness to direct foreign investment also contributed to the success. These differential characteristics are crucial for understanding Brazil's export growth and the

likely contribution of export subsidies in an environment that was conducive towards higher exports.

This is not to say that Brazil's outward-oriented policies are the best. The recent evidence from Mexico suggest a better policy package of which, the major components are an appropriate real exchange rate, low import barriers and no export subsidies. Under conditions of full employment such a policy package is likely to result in lower welfare costs than Brazil's strategy.

V. Social Costs and Political-Economy of Export Subsidies in Argentina

So far the positive analysis, shows that the support in favor of export subsidies is extremely weak, and that in only rare occasions have these subsidies contributed significantly to export growth. But even on these rare occasions, it cannot be concluded that subsidies have contributed positively to economic development. A close inspection to welfare considerations and political-economy effects, suggests that export subsidies could contribute negatively to economic welfare. This would be the case in a situation where subsidies do not contribute to export growth but only to misallocation of resources reinforcement of oligopoly position and directly unproductive rent-seeking activities.

Unfortunately, when the analayses gets into welfare and political-economy issues, the available evidence is weak if at all existent. In this section I will report some stories on Argentina a country for which I will conclude, export subsidies contributed negatively to economic development. The evidence shows some of the dimensions by which subsidy programs can result in social costs. In the first part of this section, I will discuss the available evidence on welfare considerations while the second will look at some aspects of the political-economy of export subsidies.

1. Welfare costs of export subsidies

There are several reasons why export subsidies could results in social losses. Here, I will emphasize their fiscal effects; their impact on exchange rate misalignment; their anti-employment bias and their anti-efficient export bias.

Fiscal deficits and inflation

Table 5 provides estimates of the fiscal costs of export subsidy programs. According to these estimates, during 1980-84, the average annual value of export incentives has been US$427.4 million. This represents close to 0.7% of GDP and 32 percent of the value of promoted exports. Excluding reimbursements of indirect taxes and drawbacks, the ratio of export incentives to promoted exports drops to 12 percent. This is an underestimation of the true fiscal costs of export-subsidy policies. For example, the value of export subsidies listed in Table 5 does not include a number of hidden programs, such as the provision of government-produced goods and services at subsidized prices, government guarantees provided to uncreditworthy enterprises, and others which I will report below in Table 6.

Direct and indirect export subsidies add to the fiscal deficits and therefore, to the inflationary process and are a hindrance to price stabilization efforts. In this way, a vicious circle of costly economic policies can arise over time. Protectionist trade policies and unstable real exchange rates result in a lack of export diversification and poor export performance. This, in turn, leads to the maintenance and enhancement of export-subsidy programs, which in turn add to the fiscal deficits which in turn lead to currency overvaluation and RER instability, etc.

Table 5: VALUE OF EXPORTS AND EXPORT INCENTIVES, 1980-84
(million of dollars)

	1980	1981	1982	1983	1984	Total 1980-84
1. Total exports	8,021.4	9,143.0	7,624.9	7,836.1	8,107.4	40,733.0
2. Industrial Exports	1,508.0	1,468.0	1,554.0	1,038.0	1,121.0	6,689.0
3. Value of Export Incentives	457.7	646.4	529.8	184.5	318.7	2,137.1
- Reimburserents	362.9	431.4	349.3	98.1	111.7	1,353.5
- Additional Reimbursements	12.1	11.2	4.3	0.7	-	28.3
- Drawback	-0.3	0.8	2.3	2.9	2.0	8.4
- Southern Ports	-	-	-	-	28.7	28.7
- Tierra del Fuego	-	2.2	3.1	2.9	5.9	14.0
- Sugar Compensation	7.8	7.9	2.4	0.5	0.7	19.4
- Financial Incentives	74.5	192.9	108.4	79.3	169.6	681.7
4. Benefits as a % of promoted exports (3÷2)	0.30	0.44	0.34	0.18	0.28	0.32
5. REER index (1980=100)	100.00	82.1	49.2	46.9	50.5	58.4

Source: Lines 1&2 from table 4 and line 3 in CEPAL (1986).

Export subsidies and exchange rate misalignment

The figures in Table 5 show that the maximum rate of export subsidy (line 4) occurred in 1981. This coincides with the second highest estimate of real exchange rate recorded since 1978. In contrast, during 1983 when the RER reached its lowest value, the rate of export subsidies was the lowest in the series. Therefore, during the 1980s there has been a tendency to adjust the aggregate amount of export subsidies to changes in the real exchange rates. The policy of compensating instruments in this way has destabilized the RER

with negative consequences to efficient exports and social welfare. Only import-substitute interests benefit from a policy mix of high RER on their intermediate and capital goods imports and high export subsidies for their exports. But society at large loses.

The anti-labor bias of export-subsidy policies

As said, in Argentina as well as other Latin-American countries, protection has favored the manufacturing sector particularly capital-intensive industries. For example, relatively protected manufacturing industries are 41 percent more intensive in capital than the efficient exportable manufacturing industries, a great majority of which corresponds to the foodstuff industry (Nogués, 1983, for Argentina, and Krueger 1983 for other countries)

In addition, capital-intensive industries are the ones which have received the bulk of industrial as well as export-subsidy assistance (Artana, 1986, CEPAL, 1986 and 1988, Nogués 1983 and World Bank 1988). Therefore, Argentina's export subsidies have favored capital to the detriment of labor. The social costs associated with this anti-labor bias of subsidies has increased during the 1980s pari passu with the decline in real wages, higher urban unemployment, and increase in capital costs.

The anti-efficient export bias of protection and export-subsidy policies

I have argued, that protection has had a negative impact on foreign exchange earnings. In a comprehensive empirical study, Sturzenegger (1988), has recently estimated that if during the 1980s protection had been dismantled, Argentina's agricultural sector would have exported approximately US$6 billion more per year than what it actually exported; i.e., 70 percent more than what has been exported in recent years.

What is the relation between these export losses and export subsidies? There are several ways in which one can link both factors. One way is to look at the flows of taxes and subsidies. Because of its clear comparative advantage, Argentina's agricultural sector has been one of the most discriminated against by protectionist economic policies. For example, Sturzenegger (1988) finds that approximately 50 percent of the agricultural gross-domestic product is transferred to other sectors of the economy through export and other taxes. It is thus reasonable to assume that part of the export subsidies have been financed by the agricultural sector. This has implied a reallocation of resources out of relatively efficient industries into inefficient ones. In this sense, it can be argued that export subsidies have an anti-efficient export bias and therefore, imply a loss of foreign exchange earnings. This anti-efficient export bias is worsened when subsidies are used to compensate for an overvalued currency. 1/

2. Political-economy aspects of subsidies

In what follows I provide some insights into the political-economy consequences of export subsidy policies in Argentina. Unfortunately, political-economy aspects have not been researched and therefore, I have resorted to reports on some scattered evidence of how subsidy policies can be co-opted and corrupted at a cost to the rest of the society. My suspicion, is that I have only touched the tip of the iceberg.

Rent-seeking and bureaucratic costs

In general, the introduction of a subsidy creates two social groups which will tend to support it over time. On the one hand, we have the

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1/ If land rents are to be transferrd to other parts of society, then the appropriate way of doing it is with a land tax. The successful opposition by land owners to such a tax, is also discussed by Sturzenegger.

economic groups that benefit from the subsidy, and on the other, the bureaucracy whose existence and salaries are justified by the controls they are called to exercise to distribute the subsidies. Both the rent-seeking (subsidy-seeking) activities and the bureaucracy are social costs to the national economy, i.e., resources engaged in directly unproductive activities. 1/ These costs are in addition to the welfare loss associated with the resource misallocation.

There are several questions of interest to analyze here. How important are subsidy-seeking activities? How important and efficient are the bureaucratic resources associated with the control of subsidies? Finally, what is the importance and growth of the welfare loss attributed to the export-subsidy policies?

In regard to the importance of the subsidy-seeking activities, it is most illustrative to quote the Undersecretary of Economy under Alfonsin's presidency. He has stated that "... a great part of the Argentine economy is decided in the corridors of the Ministry of Economy and of the Central Bank...." and that"... it is more profitable to spend time in these corridors than in the manufacturing plant. He also states that over time "... the state is being divided into numerous windows, each of which responds to some corporative lobby...." (Canitrot, 1986, author's translation) It is clear that policymakers feel pressed by powerful interest groups whose major intent is to extract some form of subsidies -- including export subsidies -- from the Government.

1/ The theory of rent-seeking activities is discussed in Olson (1982). The bureaucracy is a cost only if it controls bad policies. This is the case of export subsidies when they attract resources into more inefficient uses.

One consequence of subsidy-seeking activities is the growth in the number of these programs. A comprehensive study published by CEPAL (1986), summarizes the highly visible export-subsidy policies of Argentina. According to this study, subsidy policies were introduced in 1962, when the drawback regime was put into effect. Shortly after, in 1963, the government introduced the financing of exports at subsidized interest rates, and towards the end of the 1960s, special fiscal compensation was paid to exports produced with sugar, a product having important employment effects in two provinces (Jujuy and Tucumán) and whose imports are banned. Over time, the list of highly visible export-subsidy policies has multiplied. It now includes the following instruments: 1/ a) drawback*; b) reimbursements*; c) additional reimbursement for exports going to new markets; d) additional reimbursements for exports shipped through southern ports*; e) additional reimbursements introduced in 1972 for exports going to and coming from the special territory of Tierra del Fuego*; f) additional reimbursements introduced during the early 1980s for exports shipped by the customs of Salta and Jujuy*; g) additional reimbursements introduced in 1985 and provided to specific enterprises who sign a contract with the government for marginal increase of exports*; h) prefinancing of exports at preferential interest rates; i) financing of exports at preferential interest rates*; j) a couple of temporary admission regimes introduced during the 1980s*; k) special treatment granted to turnkey exports; l) fiscal credit on account of the income tax equivalent to 10 percent of the f.o.b. value of exports; and m) exemption from payment of the

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1/ Not all of them are used all the time. I indicate with an asterisk the programs that are currently used.

value-added tax.* In addition Table 6 will show that hidden subsidies have also been used.

Probably, the most important comment one can make to this large list of policies is that, except in the case of exemptions from the payment of the value-added tax -- which together with reimbursements of indirect taxes should not be considered export subsidies -- all the rest are discriminatory. Laws and decrees from the Ministry of Economy and circulars from the Central Bank are usually accompanied with appendices which list the products and/or regions and/or firms which are entitled to receive the subsidies.

Note that, not only the number but also the goals of export subsidies have multiplied over time. Initially as said, subsidies were designed with the intent of diversifying and promoting nontraditional exports. Today nevertheless, subsidies also seek to promote exports through specific ports, from specific regions, and from particular firms.

What explains this process? Much of it can be explained by a growth in the economic and political power of corporative groups who benefit from the subsidies. Ultimately, interest groups have co-opted the state to such a degree that it has lost independence of action.

Bribery and corruption

I have stated that the bureaucratic costs associated with the control of export subsidies are high. I will now argue that the efficacy of the system to control the size and destination of the subsidies can be seriously questioned.

The low efficacy of the system is not so much associated with the qualifications of the bureaucracy to administer the rules applicable to export subsidies, but to the opportunities for corruption that it allows. For example, a given product can be exported several times through southern ports.

Recall, that each time a good is exported through one of these ports, a reimbursement is paid by the treasury.

I might add that it is not necessary to act illegally to plunder the treasury. For example, close-to-fake but legal factories have been installed in promoted regions. Thus, for example, an entrepreneur manufacturing canned tomatoes, ships the cans from the factory located in an unpromoted region to a small plant in a promoted region where the only processing that takes place is the sticking of labels. When this is done, all the value of the output of this close-to-fake plant receives a tax reimbursement. A documented case has been reported by Artana (1987), who concludes that four provinces, which have granted industrial-promotion incentives, have an installed capacity of steel processing "... sufficient to produce the output of the whole country when, in fact, steel is being produced and consumed in other provinces...."

Unfortunately, when one gets into issues of bribery and corruption it is difficult to come up with hard evidence. Nevertheless, the magnitude of the potential social costs of the system can be assessed by reporting on a fraud case in detriment of the Central Bank. Recall that one of the subsidies is a credit for prefinancing exports. The purpose of this credit is to finance the productive processes of the nontraditional goods that are to be exported. The credit is in Australes and adjusted by the exchange rate; the intrest rate is one percent per year; well below international levels. 1/ In general, up to 70 percent of the f.o.b. value can be financed and up to a maximum of 180 days. I say in general, because in some cases such as ships,

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1/ The rate has only recently been increased, but it still remains below that prevailing in international markets.

the proportion to be financed can increase to 90 percent of f.o.b. value and the period of financing can be extended to three years. This degree of freedom is negotiable on a case-by-case basis.

In this regard, the most newsworthy case was a fraud and bribery case committed by a ship-building company. When the bulk of the financial resources had been disbursed, it was noticed that construction of the ship had hardly begun. Although this case is still in the courts, the reports suggest that the size of the fraud can be put in the order of US$100 million, i.e., approximately one quarter of the annual outlay of the treasury for export-subsidy purposes. 1/ (Comunicado 6857 of the Central Bank and Cronista Commercial, September 22, 1986). This I presume is a case -- albeit an important one -- among several that remain unnoticed.

Countervailing duties

Internationally, there is no agreement on the type of export subsidies that are allowed; the Subsidy Code only offers an "illustrative" list of prohibited subsidies. Therefore, countries such as Argentina that subsidize their exports run the risk of being countervailed in the market where these duties are used. This occurs mainly when exports go to the US, the country that has used countervailing duties most often at a high cost not only to itself but also to other countries (Finger and Nogués, 1987).

1/ There are several ways in which fraud can be committed against prefinancing of exports. For example, the controlling authority has no way of knowing the period during which the processing process is completed. Another way in which fraud can be undertaken is to request extensions of the expiration date of the loans to the Central Bank and obtain unnecessary lengthy periods of subsidized financial assistance.

Table 6: SOME CHARACTERISTICS OF US CVDs AGAINST ARGENTINA

Product Description	Petitioner and Date Petition Received	Type of Action	Policies Countervailed										CVD %	US Imports (1983) (Thousands US dollars)	Notes
			RF	PF	SP	DP	CF	LG	SD	CT	ID	RT			
Positive Findings															
Leather Wearing Apparel	American Textile Manufacture 1-21-77	PAPMRV 5-14-84	X										4.21	15,470	
Non-Rubber Footwear	Footwear Industries of America 1977	PAPMRV 3-16-84	X										8.83	N.A.	
Certain Textile and Textile Mill Products	Amalgamated Clothing Workers Union 1977	PAPMRV 12-19-84	X	X									0.0	N.A.	
Wool	National Wool Growers Association 9-21-82	PAPMRV 9-17-85			X								7.15	2,501	
Cold-Rolled Carbon Steel Sheet	US Steel Corporation 11-10-83	FA 4-26-84					X	X	X	X	X		5.44 (others)	40,804	CVD assessed on a case-by-case 6.47% for SOMISA (CVD) 2.34% for Propulsora 5.447 for others est. net bounty = 6.07%
Oil Tubular Goods	Lone Star Steel Company CF&I Steel Corporation 6-13-84	FA 11-27-84				X							0.0	8,178	
Certain Textile Mill Products	American Textile Manufacturer Institute Amalgamated Clothing Workers Union International Ladies Garment Garment Workers Union 7-31-84	FA 3-12-85	X	X	X	X						X	4.53 15.87	4,012	CVD of 4.53% for textile mill products and 15.87% for apparel
Carbon Steel Wire Rod	Atlantic Steel Corporation 3-6-82	SOI 9-27-82	X	X									13.80	16,334	Argentina agrees to stop granting export subsidies to this product.
TOTAL			5	3	2	2	1	1	1	1	1	1	0-24.13	87,339	

Abbreviations:

PAPMRV Preliminary Results of Administrative Review
FAPMRV Final Results of Administrative Review
FA Final Affirmative Action
SOI Suspension of Investigation
PF Resolution
LG Loans and loan guarantees to SOMISA
PF Preferential prefinancing of exports
SP Incentives for exports from southern ports
DP Post-financing of exports under circular OCRAC 1-9
CF Government equity infusions
SD SOMISA's purchase of oil
CT Capital tax exemption for SOMISA
ID Import duty exemptions
RT Regional tax incentives

Source: Author's elaboration based on Federal Register (Several Issues).

Table 6 presents a summary of the characteristics of the countervailing-duty investigations of the US against Argentina. Ten subsidy policies have been countervailed. An estimate of one dimension of the social costs of CVDs is provided by the value of the transfer from Argentina to the US Treasury. This can be estimated by multiplying the CVD rate times the quantity exported. The figure comes out to approximately US$3.5 million in 1983. Although this cost is low, it is only part of the costs confronted by the subsidizers when their subsidies are countervailed or threatened to be countervailed. Another important part of this cost is the harassment effect of CVDs and the legal costs associated with these policies (Finger and Nogués, 1987).

Subsidies for state monopoly

In Argentina, the steel industry has been dominated and controlled by Sociedad Mixta Siderurgica (SOMISA), part of the military-industrial complex controlled by Fabricaciones Militares.

In spite of its inward-oriented nature, SOMISA, as many other protected firms, usually undertakes exports when there is a recession in the domestic market. It was during 1983, when this firm faced a countervailing-duty investigation in the US. It can be seen from Table 6, that SOMISA's exports received many subsidies. Of the six programs that were effectively countervailed by the US, five of them were not used in other investigations, i.e., SOMISA seems to have benefited from five tailor-made subsidies. These policies include capital infusions and loan guarantees provided to an uncreditworthy firm; petroleum provided at subsidized prices by another state enterprise; exemption from the tax on capital; and exemption from import tariffs which at that time was granted exclusively to SOMISA. Finally, the

countervailing duty applied against Argentina in the case of SOMISA was 6.4 percent. Obviously, this countervailing duty has implied a social cost to the country. Nevertheless, this cost appears to be significantly lower than the cost society has paid for sustaining a monopolistic and politically powerful industry and reducing competition. It is for these reasons that the liberalization of the steel industry, implemented in early 1988, has been a significant economic measure of Alfonsin's administration. 1/

Loans to uncreditworthy countries

Argentina has also lost money in several instances of turnkey-export operations. These exports are financed by long-term loans to the countries importing them. At the same time, the Central Bank assures the exporter that his bill will be paid by the time the physical operation is finished.

As the Central Bank assumes all the risk, the incentives for the exporter to check the creditworthiness of the importer is eliminated. As has been the case with several financial institutions around the world, the Central Bank has not been able to predict the serious financial troubles into which many countries would get into.

Unofficial estimates put the loss to Argentina of bad loans at a level which could be as high as US$1 billion. One thing is clear; if the Central Bank had not subsidized these exports nor engaged in granting loans to

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1/ Even during 1979-1982 when the trade regime of Argentina was being liberalized and protection was generally granted by declining ad valorem tariffs, the products produced by the steel industry were one of the few which continued under a regime of import licensing. Obviously, one reason was that the country was then governed by the military, the owner of the enterprise (Nogués, 1986a). An idea of the magnitude of the protection provided to the steel industry is given by the fact that towards the end of the 1970s, the effective rate of protection was around 90 percent; among the highest in a sample of manufacturing industries.

risky countries, the financial troubles of Argentina would be less serious today than what they are.

V. The Parallels Between the Consequences of Export Subsidies and Countervailing Policies

The positive analysis of the experience with export subsidies in Latin America suggests that the support in favor of this policy is extremely weak. Also, when in addition to the positive analysis, welfare and political-economy considerations are introduced into the picture, the support in favor of subsidies weakens still further. To recapitulate, I have shown, that it is possible and in some countries -- Argentina -- likely for export subsidies to:

- Benefit the exports of relatively protected and powerful enterprises, thus reinforcing oligopoly positions;
- Have a tendency to compensate fluctuations in RERs;
- Have an anti-efficient export bias;
- Have an anti-employment bias;
- Have an inflationary bias;
- Tax the consumers;
- Create incentives for directly unproductive subsidy-seeking activities;
- Create opportunities for bribery and corruption; and
- Fail to improve aggregate export performance of subsidized exports.

These dimensions of the problems with subsidies that benefit exports are independent of countervailing measures (CVMs). But CVMs add other problems to subsidizing countries, namely, that they increase the uncertainty of access to the markets of countervailing countries and in cases of

affirmative findings, create a transfer of funds from the subsidizing to the countervailing country.

The risks of CVMS for the countervailers having similar consequences to subsidies can be non-negligible. For example, countervailing measures can have several social costs, including:

- Protection of importable industries (Finger et al., 1982), which in some cases might reinforce oligopoly positions (Messerlin, 1989);
- Their use as an instrument to compensate fluctuations in RERs (Balassa, 1988);
- An anti-efficient export bias which is the direct consequence of the previous effects;
- Taxing the consumers;
- Creating directly unproductive protection-seeking activities;
- Increasing market uncertainty and harassment (Finger and Nogués, 1987);

Perhaps, the major difference could be that bribery and corruption seem to affect CVM policies less than subsidies. In contrast, much of the rent-seeking activities is directed to changing the legal rules so that CVMs can be used more easily by the protected groups (Grinols, 1988). One apparent plus of CVDs is the funds which they are able to extract from subsidizing countries. Whether this is really a plus, depends on what is done with the funds.

VI. Concluding Remarks

This paper has discussed the experience of several Latin-American countries with export subsidies. More than 20 years ago, the economic reasoning on export subsidies suggested that they would result in higher export diversification and performance. In contrast, experience shows that at

the macro-level, this has generally not occurred. I have argued, that the reason for this has been that, in a majority of cases, export subsidies were not supported by more open import policies. As a result, export subsidies reduced only marginally the anti-export bias of Latin-American countries. Additional negative effects on exports have come from very unstable RERs.

In Brazil, the one country where export subsidies appear to have resulted in a positive contribution to exports, they were accompanied by import liberalization, significant stabilization of the RERs and other policies conducive to export growth. I have also compared Brazil with Mexico who during recent years have performed very well in terms of exports in spite of having at most, minimum export subsidies. I have suggested that for equal degrees of export success the strategy of Mexico is likely to entail lower social costs than that of Brazil.

In contrast to Brazil the experience of other Latin American countries with export subsidies and in particular that of Argentina, has been a failure. Perhaps, Argentina is an extreme case, where subsidy policies have been detrimental to development. But it could also be that perhaps, it is one of the few countries where social and political-economy costs have been looked at more carefully. For example, corruption always detracts from whatever benefit subsidy policies might have. And corruption of subsidies appears to be quite prevalent. For example, in a recent article, The Financial Times quotes Mr. McGregor -- Britain's Agriculture Minister -- as saying that it is clear that the fraud problem with EC agricultural subsidies "...is very large indeed." Mr. Hermann (Financial Times, February 13, 1989) estimates that this fraud "... has reached ECU $6 billion, about a tenth of the EC budget." Another instance of fraud, is reported by Milanovic in his study on Turkey, a country where subsidies have been used in an environment conducive to export

success. In this case, the fraud against the tax rebate program led to fictitious exports estimated to have been between "... 5 and 10 percent of total Turkey's exports..." (Milanovic, 1986, p. 12) These are very high figures which cast further doubts on the social benefit of export subsidies.

With this background I will conclude this paper with three brief remarks. First, so far, the participants on the negotiations on subsidies and CVMs seem to be seeking two major goals. For the subsidizers, the goal is to have rules that would make the introduction of CVMs more difficult. For the countervailers, the goal is to have more stringent rules on subsidies. Thus, both subsidies and CVMs are seen as good policies by their users. The evidence of this paper that these conclusions are not supported by empirical evidence and strongly suggests that export subsidies and countervailing measures imply costs to the sccieties using them.

Second, the failure of export subsidies, particularly in the case of Argentina, should serve as a reminder for economists and policymakers, of the importance of distinguishing what is possible from what is likely. It is always possible to put forward arguments and create models that show a positive impact of subsidies. The crucial thing when making policy is to assess the possibility and likelihood of the consequences expected from the analysis. In this regard, the major conclusion of this paper is that the likelihood of subsidies having an important positive effect on exports is low, when they are applied in a context of high import protection and unstable RERs.

Finally, I would like to emphasize the social preoccupation with which this paper started. Export subsidies are competing with other governmental programs, in a period when the welfare of Latin-America has declined dramatically and increasing numbers of people are falling into

conditions of extreme misery. If export subisidies are recognized to be a failure, they should be dismantled. I'm sure that these resources could be invested in more productive uses for example in health and education projects.

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